"ITS ALL IN THE CRANK HANGER"

THE Racycle

1911

THE MIAMI CYCLE & MFG. CO.
MIDDLETOWN, OHIO, U. S. A.

"ITS ALL IN THE CRANK-HANGER"

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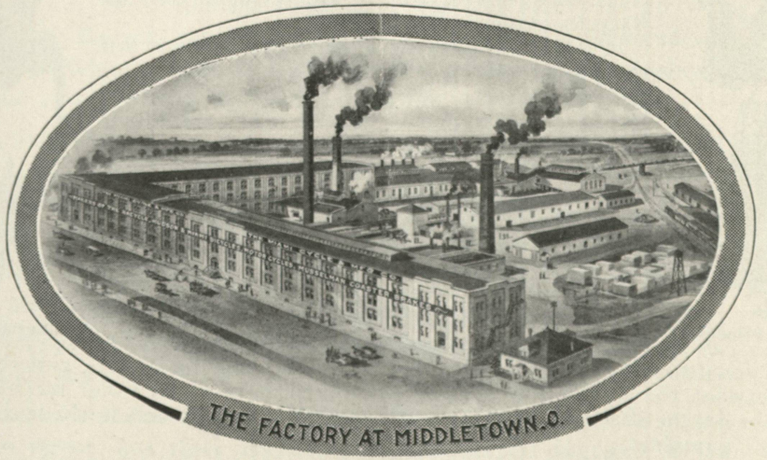


THE FACTORY AT MIDDLETOWN, O.

MADE ONLY BY

THE MIAMI CYCLE & MFG. CO

MIDDLETOWN, OHIO, U. S. A.

EASIEST RUNNING BICYCLE MADE

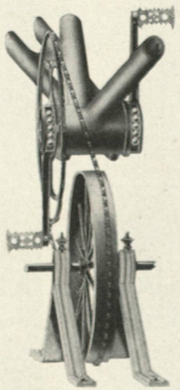
TL 435 .M523 R33 1911

"Just a Word"

THERE is really nothing remarkable about the fact that the Racycle is the largest selling, high-grade bicycle in the world to-day, nor is it to be wondered at, that, as each year goes by, this extraordinary wheel takes a firmer and firmer grip on the hearts of the lovers of a good wheel. There are reasons for it and mighty good reasons at that.

In the first place absolutely nothing cheap or inferior is permitted to enter into the construction of a Racycle. All raw material is as carefully and as closely inspected, before being put to use, as a mother would guard the ingredients of her infant's food and each piece and part is carefully inspected in process, so that, after the last inspector of the completed Racycle has put his stamp of approval on it, we know that our customers will receive just what they pay for—THE BEST AND MOST RELIABLE BICYCLE THAT CAN BE PRODUCED.

ISN'T THIS RIGHT?

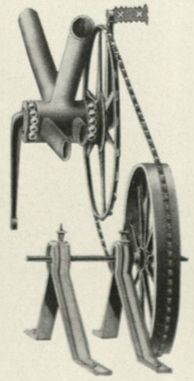


Racycle Principle.

In the second place, the crank construction of the Racycle is entirely different from that of any other bicycle made, and as we are the exclusive owners of the patents, no one else can use our crank construction and it will be found only on Racycles made in our factory.

In the accompanying illustrations we show you the correct principle of the Racycle hanger (on the left) and the incorrect principle of all other bicycle crank hangers (on the right). You will note that the bearings in the Racycle hanger turn in the hubs of the cranks, so that the foot pressure is exerted directly over the bearings, the crank hanger thereby being in perfect balance, whereas, in the hanger of all other bicycles, the bearings are set close together and on the inside of the sprocket, thereby creating a leverage or pressure on the bearings that makes the ordinary bicycle run considerably harder than the Racycle. The Racycle construction reduces the pressure on the bearings by 27.9%, and the sprocket being between the bearings, instead of outside them, as in all other bicycles, reduces the strain on the chain by 33⅓%, all of which we prove conclusively in the "Three Reasons" pamphlet.

ISN'T THIS WRONG?



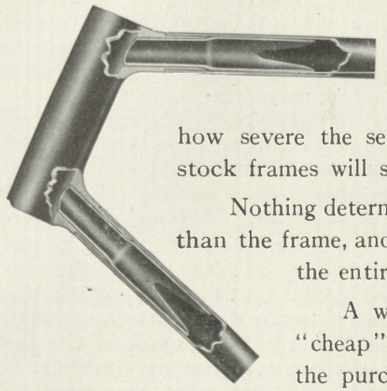
Bicycle Principle.

Clearly, then, with less pressure on the crank bearings and less strain on the chain, the cranks must turn with less effort than those of an ordinary wheel, and the RACYCLE must be the easiest running of all bicycles.

Keeping these points in mind, we ask you to kindly give this entire catalog thoughtful attention, for, having done so, we feel sure you will agree that the Racycle is entirely in a class by itself.

THE MIAMI CYCLE & MFG. CO.,
MIDDLETOWN, OHIO.

The Racycle Frame



THE frame of a bicycle is like the foundation of a building and similarly it must be very strong and dependable.

It has been always our boast, that no matter how severe the service or how heavy the rider, any of our regular stock frames will serve the purpose and give unqualified satisfaction.

Nothing determines the true quality or character of a bicycle better than the frame, and upon the frame depends the life and usefulness of the entire machine.

A weak, inferior frame such as is used in making a "cheap" bicycle is a source of great danger and risk, but the purchaser of a Racycle need have no worry on that score, for every Racycle frame is built of best quality 19 gauge seamless steel tubing fully and completely guaranteed against inferior material or workmanship (see page 6) and only the very best and strongest construction is used throughout.

All Racycle frames are built with extra long, fish mouthed reinforcements, as shown in the above illustration, which add tremendously to the strength of the frames and successfully relieve the tubing of severe strain at the points at which the greatest strain comes.

In addition to this, our fork crowns are of drop forged steel with extra heavy fork sides and have never been known to break.

Head fittings turned from solid bar stock taking $\frac{3}{16}$" balls, are used exclusively in all Racycles.

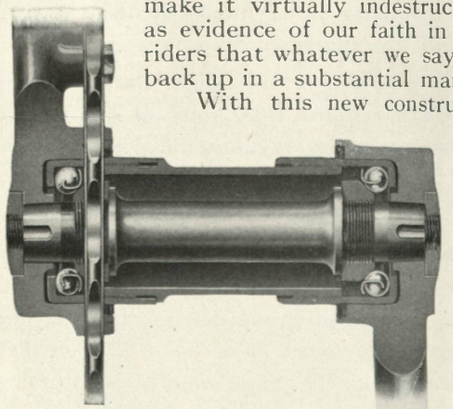
Some concerns claim to put out $60.00 bicycles at ridiculously low prices, selling them direct, but these machines can no more be compared to the Racycle than a cheap $1.00 watch can be compared with the finest 18 jeweled movement.

It costs more to build our high-grade Racycles, than these concerns ask for their bicycles, but in buying a Racycle you get a wheel that will last you a life time and will be fourfold cheaper in the end than any of these so-called "cheap" bicycles—Don't be deceived—Buy where the quality is.

The Racycle Crank Hanger

THE 1911 Racycle Crank construction makes it possible for us, from this time on, to give a 3 year guarantee on Racycle Cranks.

By this new construction the strength of the Hanger is so wonderfully increased as to make it virtually indestructable and we offer this extended guarantee, as evidence of our faith in the hanger, and in order to convince our riders that whatever we say about Quality in the Racycle we intend to back up in a substantial manner.

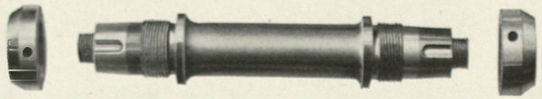


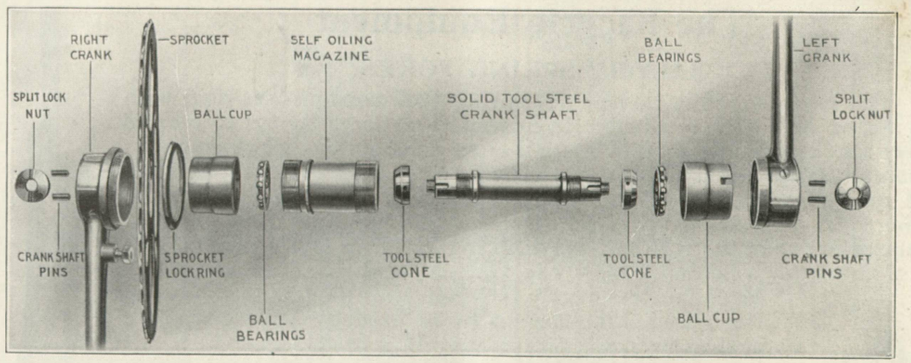
With this new construction we maintain, absolutely, as you will note from the illustration, the Racycle principle of the balls rolling in the hubs of the cranks, thereby giving the Racycle rider the benefit of 27.9% less pressure on the crank bearings than he has in propelling any ordinary bicycle and at the same time, use a solid tool steel crank shaft or axle. See illustration at bottom of page.

This Crank Shaft is made of the best quality of tool steel, that we could get for the purpose, $\frac{7}{8}$" thick in the center and $\frac{13}{16}$" thick at the ends, being tapered at the ends to insure an absolutely tight fit, free from any play or tendency to work loose.

The cranks are forged from a special 55 point carbon steel and at the point where the axle passes through are ½" thick thus giving tremendous strength and extremely large bearing surface positively insuring against slipping or becoming loose. The axles are pinned to the cranks by two tapered pins on each end, the pins being also of tool steel of the same quality as the Crank Shaft. The Cranks and Shaft are drilled and reamed together so as to make a perfect fit and so accurate is this work that every part of the new Racycle Crank Hanger is absolutely interchangeable. In addition to holding the Cranks and Shaft together, the Crank pins being of the same hardness divide the wear equally amongst the three parts—the cranks, the crank shaft and the tapered pins.

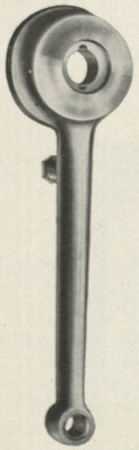
To further insure strength and to prevent even the slightest possibility or tendency for the cranks to work loose, we lock the cranks and shaft together by a split lock nut on each end of the shaft. This lock nut is tapped just a trifle smaller than the threaded ends of the crank shaft and then split on one side. When the shaft is seated in the crank the lock nut is spread open, by the special wrench that we provide, just enough to make it fit the threaded end of the crank shaft and with this wrench it is screwed up tight on the shaft. After tightening, the wrench is removed and the nut springs back to its original position, thereby securely and effectively locking the nut on the end of the shaft so that it is utterly impossible to remove it without applying the special wrench. This is the most effective crank fastening ever used on any bicycle and positively cannot work loose.

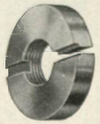




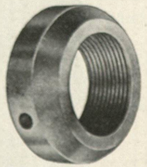
The crank cones are also of tool steel skillfully tempered in oil and are ¼" thick at the center, tapering to $\frac{3}{32}$" at the end, giving plenty of strength and fine bearing surface See illustration which gives an excellent idea of the strength and durability of the new tool steel cones. The cones are threaded on the shaft so that they fit perfectly, and being of tool steel will last for years without perceptible wear.

A feature of no small importance in the new hanger, is the method of adjusting the bearings, without the necessity of removing the cranks. On the outside of the left crank (the adjusting side) close to the point at which the crank shank joins the hub of the crank you will notice a small screw. In the event that you wish to readjust the crank bearings, remove the screw and insert the larger screw that will be found in each repair kit and move the crank around until this large screw seats itself in the slot in the crank cup made there for that purpose. Then tighten down on the screw and move the crank back or forth which will loosen or tighten the crank bearings as desired. Before commencing this, however, be sure to loosen the binder bolt on the under side of the crank box, loosening only the one directly under the left side of the crank hanger. The left side of the hanger is always the one opposite the sprocket side.





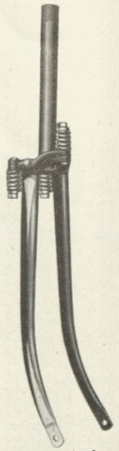
After the bearings are adjusted, remove the large screw, replace the smaller one and be sure to tighten up the binder bolt on the under side of the crank box. This is a very simple method of adjusting crank bearings and will be greatly appreciated by all who have had to struggle with other bicycles to get the bearings adjusted to run properly.



After investigating the make up of this new Racycle Crank Hanger, one can readily realize why it is that we display such unbounded confidence and have the temerity to offer a 3 year guarantee when all other bicycles are guaranteed for one year only.

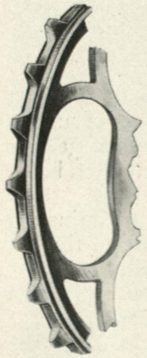
We have told you about the new hanger and have explained its construction—we are willing to assume all the risk and come to you this year with the Greatest and Best that has ever been offered on the American market in the way of a high-grade bicycle.

The Racycle Equipment



RACYCLE SPRING FORKS.

The Racycle Safety Cushion Tri-Spring Fork combines the rigid with the spring fork and, in addition to having three large springs to receive direct shocks, is equipped with internal or rebound springs, which do away, absolutely, with all jar and vibration. It is so constructed that it can easily and quickly be converted into a Rigid Fork, by merely tightening the spring nuts with a hand wrench. There is absolutely no danger or risk assumed in riding the RACYCLE Tri-Spring Fork, for even should one, or all of the springs become broken, the fork can still be ridden as a Rigid Fork, and it is utterly impossible for the fork to give way, though all of the springs break at once. We guarantee against breakage, either of springs or forks.



RACYCLE SPROCKETS.

All RACYCLE Front Sprockets are made with a biplane or shoulder on each side of the teeth, as shown in the accompanying illustration. This is to prevent the chain from wedging between the teeth on the sprocket, and it also distributes the wear on the chain. The side plates of the chain are permitted to take a goodly part of the wear, and thus prolong the life of the chain, so that a chain, running over a biplane sprocket, will last three or four times as long as on an ordinary sprocket. Similarly, the biplane sprocket will outwear an ordinary sprocket, as the wear is not confined entirely to the teeth, but is evenly distributed.

The Crank Hanger with which this Racycle is equipped is guaranteed by the Miami Cycle & Mfg. Co. for a period of Three Years, commencing with the year in which it is made and sold. The Frame is also guaranteed, by the said Company, for a period of one year. This guarantee covers any defect in material or workmanship, but we positively do not guarantee against accidents, misuse or neglect. Any defective part, coming under this guarantee, will be replaced free of charge by us, when receipt of same at our factory, transportation charges prepaid.
The Miami Cycle & Mfg Co.
T. R. Jacoby
Gen. Mgr.
Middletown, Ohio.
THE MIAMI CYCLE & MANUFACTURING CO.
SEAL
OHIO.

THE RACYCLE ROADSTER.

AT THE price at which we offer this Model, we make it possible for anyone to secure a better bicycle than is ordinarily sold for $50.00 or $60.00, for only a little more than one-half that price.

This machine is an excellent road wheel, and will outlast, many times over, any ordinary bicycle, no matter what the price might be. Although the price is low, the material and workmanship is of the very best, and Racycle Model 165 is fully guaranteed. The crank hanger on this model is guaranteed for 3 years.

SPECIFICATIONS

MODEL 165

COLOR—Frame, Black. Fork Crown, and Tips nickeled V-shape.

HEIGHT—20, 22 and 24 inches.

FRAME—Diamond, 1-inch, 19-gauge seamless steel tubing, with extra long reinforcements at all joints. $\frac{3}{16}$" Balls in head.

WHEEL-BASE—45 inches. Tread, 4½ inches.

HANGER—Magazine self-oiling Racycle Crank Hanger. Guaranteed for 3 years. Drop 2½ inches.

SPROCKETS—Front 30-tooth. Rear, 9, 10, 11 and 12-tooth.

RIMS—No. 2 Aluminum finish, with Racycle Blue center and stripes on sides.

HUBS—Self-oiling, turned from solid bar.

PRICE—$35.00

TIRES—Racycle Single Tube, fully guaranteed.

HANDLE BARS—Adjustable Extension, with Wear Well Grips.

SADDLE—Star 2-coil. Option, Eagle Special.

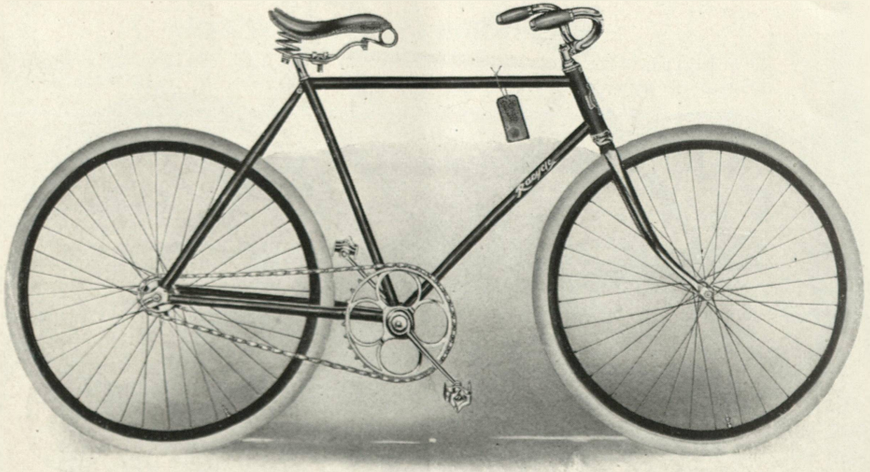
PEDALS—Bridgeport Self-Oiling.

CHAIN—Diamond, No. 45 ⅛-inch.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5.00 extra See page 18.



THE RACYCLE ROADSTER.

ONE of the most popular road wheels that we make. From the fact that is is built of best quality seamless steel tubing, with long, fish-mouthed reinforcements, it is fully strong enough to withstand tremendous strain, and will successfully carry any rider, no matter what his weight may be. Note the splendid equipment and the beautiful finish that we offer on this machine. Also note that the crank hanger is guaranteed for 3 years.

SPECIFICATIONS

MODEL 164 — **PRICE—$40.00.**

COLOR—Frame, No 7 Racycle Blue. Fork Crown and Tips nickeled V-shaped.

HEIGHT—20, 22 and 24 inches.

FRAME—Diamond, 1-inch, 19-gauge seamless steel tubing, with extra long reinforcements at all joints. 3/16" Balls in Head.

WHEEL-BASE—45 inches. Tread, 4½ inches.

HANGER—The Improved, self-oiling, dust-proof Racycle Crank Hanger, guaranteed for 3 years. Drop, 2½ inches.

SPROCKETS—Front, 30-tooth. Rear 9, 10, 11 and 12-tooth.

RIMS—No. 2 aluminum finish with Racycle Blue Center and stripes on sides.

HUBS—Racycle self-oiling, turned from solid Bar.

TIRES—Single clinch with steel lined rims. Option, Hartford No. 77.

HANDLE BARS—Kelly, No. 5 with Wear well Grips, and Extension Stem

SADDLE—Star U. Option, Eagle Roadster.

PEDALS—Star self-oiling.

CHAIN—Diamond, No. 45, ⅛-inch, Block. Option, Roller.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.

RACYCLE LADIES' PACEMAKER.

THIS is the only Ladies' Bicycle made, as far as we know, that has a large 30-tooth front sprocket. Almost all ordinary wheels for ladies are equipped with a 22 or a 24-tooth front sprocket; but we use the 30-tooth for the reason that, with our wonderful crank construction, the larger the sprocket the more the strain on the chain is reduced, and it makes our Ladies' Pacemaker a prime favorite with all ladies who desire the greatest amount of pleasure with little effort. The crank hanger is guaranteed for 3 years.

SPECIFICATIONS

MODEL 163 — **PRICE—$40.00.**

COLOR—Frame, Black, Fork Crown and Tips nickeled V-shaped.

HEIGHT—20 or 22-inch.

FRAME—1-inch, 19-gauge seamless steel tubing, with extra long reinforcements at all joints. 3/16" balls in head.

WHEEL BASE—45 inches. Tread, 4½ inches.

HANGER—Magazine self-oiling, Racycle Crank Hanger. Guaranteed for 3 years. Drop, 2½ inches.

SPROCKETS—Front, 30-tooth. Rear 10 or 11-tooth.

RIMS—No. 2 Aluminum Finish, with Racycle Blue Center and stripes on sides.

TIRES—Racycle Single Tube guaranteed.

HUBS—Racycle Self-Oiling, turned from solid Bar.

HANDLE BARS—Adjustable with Wear Well Grips.

SADDLE—Troxel 14-C Spiral Spring.

PEDALS—Bridegport Rubber.

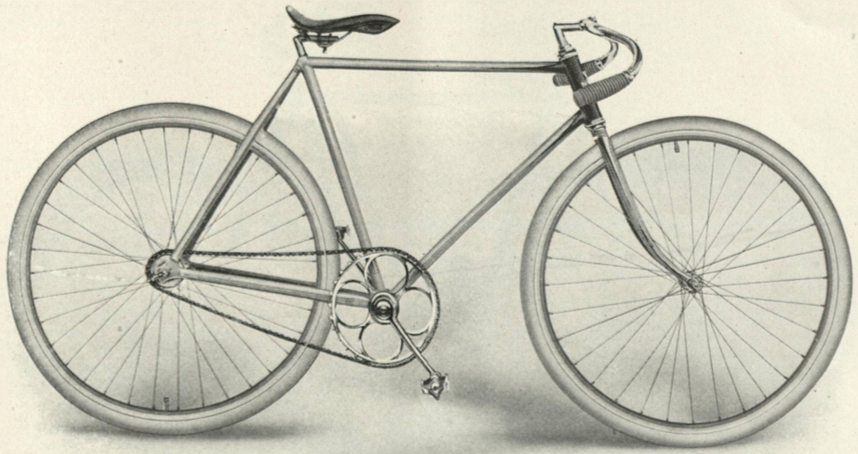
CHAIN—Diamond No. 45. ⅛-inch.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

CHAIN GUARDS—Enameled to Match Frame. Dress Guard finished to Match Rims. Net lacing.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5,00 extra. See page 18.



THE RACYCLE YELLOW FLYER

HERE is a genuine Racing wheel that will appeal to all "speed merchants." This little Flyer is built for speed, and with the easy-running Racycle Crank Hanger, makes a combination that leaves them all behind. It has a close-coupled rear wheel, designed to give the rider increased speed, with no greater effort than in ordinary riding. The Racycle Racer has been and always will be "a winner" on account of its easy running crank hanger. Equipped with the 3 year guaranteed crank hanger.

SPECIFICATIONS

MODEL 161

PRICE—$50.00.

COLOR—Frame, No. 2 Canary Yellow with No. 5. Crimson spiked head and striping. Fork Crown and Tips nickeled V-shaped.

HEIGHT—20, 22, or 24 inches.

FRAME—Diamond, 1-inch, 19-gauge, Seamless Steel tubing with extra long reinforcements at all joints. $\frac{3}{16}$" balls in head.

WHEEL-BASE—41½ inches. Tread, 4½ inches.

HANGER—The improved self-oiling, dust-proof Racycle Crank Hanger. Guaranteed for 3 years. Drop, 2½ inches.

SPROCKETS—Regular 30-tooth front. Option, 24 Rear 8, 9, 10, 11 or 12.

PEDALS—Star Racing.

RIMS—No. 4 Aluminum Finish, with Red Center and Red Stripes on sides.

HUBS—Racycle Special Racing, self-oiling, turned from Solid Bar.

TIRES—Hartford, No. 80, 1-inch or 1¼-inch

HANDLE BARS—Kelly No. 3 Special Racing, with Soft Rubber Grips. Extension Stem.

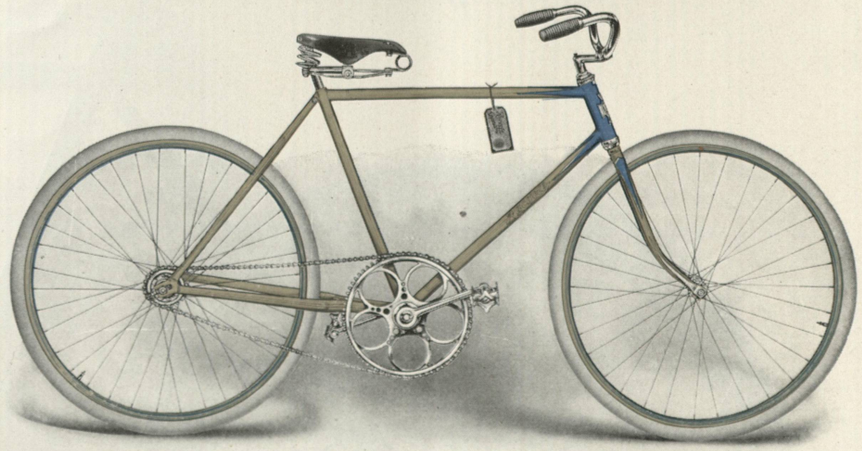
SADDLE—Troxel No. 10-A, or Persons' Royal Racer.

CHAIN—Diamond No. 45, ⅛-inch. Option Roller.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

"ITS ALL IN THE CRANK-HANGER"



The Racycle Rideabout with Musselman Coaster Brake.

IT HAS been clearly demonstrated that the RACYCLE Rideabout, with its 70-tooth ½-inch pitch front sprocket, is a grand success, for during the last two seasons, this wheel has easily been one of our best and most popular Models. "The Silent Rideabout" is well and favorably known the world over, and its place has been firmly established as an easy-riding, strictly high-grade bicycle in every sense of the word. Note carefully the complete specifications as given below. We offer a 3 year guarantee on all Racycle crank hangers.

Musselman Coaster Brake no extra on this model.

SPECIFICATIONS

MODEL 162

PRICE, $55.00.

COLOR—Frame No. 3, French Grey with No. 7 Racycle Blue Spiked Head and Striping. Fork Crown and Tips nickeled V-shaped.

HEIGHT—20, 22 and 24-inch.

FRAME—Diamond. 1-inch. 19-gauge Seamless Steel Tubing with Extra Long Reinforcements at All Joints. $\frac{3}{16}$-inch Balls in Head.

WHEEL-BASE—46 inches. Tread, 4½ inches.

HANGER—The improved, self-oiling, dust-proof Racycle Crank Hanger. Guaranteed for 3 years. Drop 2½ inches.

SPROCKETS—Front, 70-tooth, ½-inch pitch. Rear, 20, 22, 24. All ½-inch pitch.

HUBS—Racycle Self Oiling, turned from Solid Bar.

RIMS—No. 2 Aluminum Finish with Racycle Blue Center and Stripes on Sides.

TIRES—Single Clinch, with steel lined Rims. Options, Hartford No. 77 or Kokomo Double clincher.

HANDLE BARS—No. 5 Kelly, Plain or Extension with Soft Rubber Grips.

SADDLE—Eagle Empire. Option, 30-U.

PEDALS—Star Self-Oiling.

CHAIN—½-inch pitch, Diamond Roller No. 65.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman. See page 18.

EASIEST RUNNING BICYCLE MADE

The Racycle Pacemaker

THE RACYCLE PACEMAKER WITH MUSSELMAN COASTER BRAKE.

That "the Best is always the Cheapest" is generally conceded by all who have studied practical economy, and that there is genuine economy in buying the Racycle Pacemaker, none can deny. Only the best of everything is used in its construction and equipment, and the large 40-tooth Front sprocket, Roller chain and long wheel base make it the easiest riding of all and a beautiful wheel to look upon. The Racyle Pacemaker is built to last a lifetime. Note that we offer the Tri-Spring Fork this year without extra charge, and that the crank hanger is guaranteed for 3 years.

MODEL 160 **SPECIFICATIONS** **PRICE—$60.00.**

COLOR—Frame, Gun Blue No. 1. Forks, Crown and Tips nickeled V-shaped.

HEIGHT—20, 22 and 24-inch.

WHEEL-BASE—46 inches. Tread, 4½ inches.

FRAME—Diamond, 1-inch, 19-gauge Seamless Steel Tubing, with Extra Long reinforcements at all joints. $\frac{1}{16}$" balls in head.

HANGER—The improved, self-oiling, dust-proof Racycle Crank Hanger. Guaranteed for 3 years. Drop, 2½ inches.

SPROCKETS—Front, 40-tooth. Rear, 12, 13, 14 or 16. (No 15-tooth.)

RIMS—No. 2 Aluminum Finish with Racycle Blue center and stripes on sides.

HUBS—Racycle Self-Oiling, turned from Solid Bar.

TIRES—Single Clinch, with steel lined Rims. Option, Hartford No. 77 or Kokomo Double Clincher.

HANDLE BARS—Kelly No. 5, Plain or Extension Stem. Soft Rubber Grips.

SADDLE—Racycle.

PEDALS—Star Self-Oiling.

CHAIN—⅛-inch Diamond Roller No. 61.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman. See page 18.

SPRING FORK—Tri-Spring Fork furnished, if desired, at no extra charge.

THE MIAMI BICYCLE.

THIS Model is not a Racycle, although it is built of the very best quality, seamless, steel tubing, and is equipped with our own drop-forged, one-piece Hanger of the Fauber pattern. We offer this machine as a low-priced, high-grade bicycle, for it will compare, most favorably, with any $40.00 ordinary bicycle made. All the equipment is fully guaranteed, also the frame and crank construction. It is furnished this year in a fancy finish, a combination that is exceptionally pleasing.

SPECIFICATIONS

MODEL 168, PRICE $25.00.

COLOR—Black with No. 17 Blue Spiked Head. Rim Finish No. 169.

HEIGHT—20, 22 and 24 inches.

FRAME—1-inch, 19-guage. $\frac{3}{16}$" balls in head.

WHEEL-BASE—45 inches.

SPROCKETS—Front, 26-tooth. Rear, 8, 9 or 10-tooth. Gears, 72, 80 or 91.

TIRES—Marathon, Single Tube Fully Guaranteed.

HANGER—Fauber Pattern, one piece.

WITH MUSSELMAN BRAKE, $30.00.

HANDLE BARS—Adjustable Extension, with Wound Leather Grips.

SADDLE—Troxel No. 4, Coil.

HUBS—Self-Oiling, turned from Solid Bar.

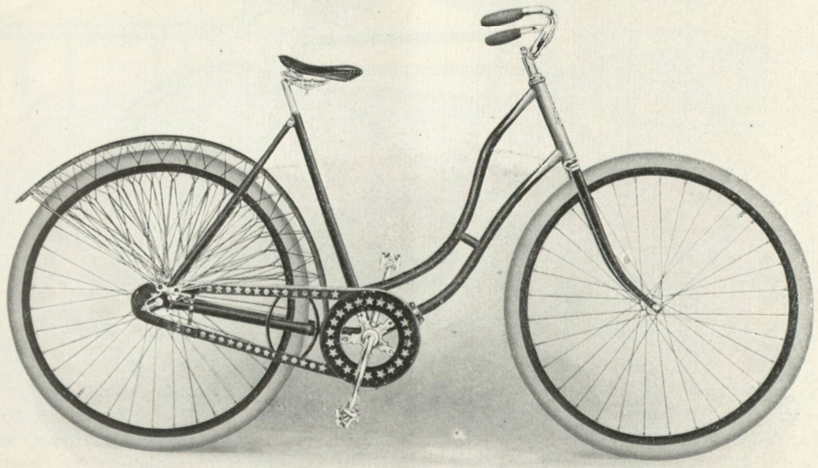
PEDALS—Standard Rat Trap.

CHAIN—$\frac{3}{16}$", Diamond, No. 29.

SEAT POST—Forward L, with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.



MIAMI LADIES' BICYCLE.

NO lady need complain of not being able to procure a good bicycle, at a very reasonable price as long as we continue to furnish this Miami Model 169. Only the very best, seamless, steel tubing is used, and, in fact, this wheel is a fitting companion to our Men's Miami, as described on the opposite page. Ladies need have no fear of repair-shop trouble and expense, in purchasing this wheel, and it is furnished complete with Dress and Chain Guards and a very comfortable spring saddle.

SPECIFICATIONS

MODEL 169, PRICE, $25.00.

COLOR—Black, with No. 17 Blue Spiked Head. Rim Finish No. 169.

HEIGHT—20 and 22 inches.

FRAME—1-inch, 19-guage, $\frac{3}{16}$" balls in head.

WHEEL-BASE—45 inches.

SPROCKETS—Front, 24-tooth. Rear, 9 or 10-tooth. Gears, 68 or 74.

TIRES—Marathon Single Tube, Fully Guaranteed.

HANDLE BARS—Adjustable, with Wound Leather Grips.

WITH MUSSELMAN BRAKE, $30.00.

SADDLE—Troxel No. 7, B Coil.

PEDALS—Standard Rubber.

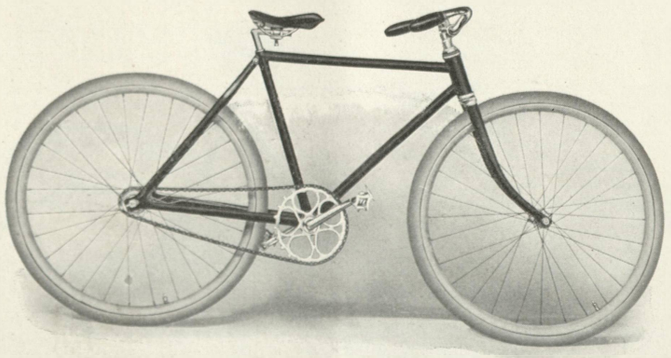
HUBS—Self-Oiling, turned from Solid Bar.

CHAIN—$\frac{3}{16}$", Diamond, No. 29.

SEAT POST—Forward L. with Pinch Bolt Seat Cluster.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.



THE "RAY" JUVENILES.

OUR line of Juvenile Bicycles for this year is the best and most complete, in every way, that we have ever turned out. The frames are substantially built, to withstand hard usage, and the crank construction makes them easy-running, so that the little folks can obtain plenty of good, healthful exercise without wearing themselves completely out. To ascertain the most desirable Model for a child, secure the inside leg measurement to the extended ball of the foot. Then add to the height of the frame the length of the crank, and allow two inches for the saddle. This will give the proper height frame to order.

GENERAL SPECIFICATIONS.

Main Frame Tubing, 1-inch, 19-gauge. Fork Crown, Drop Forged, semi-arch pattern, with extra strong fork sides enameled to match frame. Forward L seat post, with pinch bolt seat cluster. Hubs turned from solid bar stock and built up with best quality piano wire spokes, heavily nickeled.

BOYS	Price
MODEL 24—16″ Frame, 24″ Wheels	22.50
MODEL 26—18″ Frame, 26″ Wheels	25.00

COLOR—No. 7 Blue, with No. 9 Red Spiked Head.

RIMS—No. 76 Aluminum Finish, Handsomely Striped.

TIRES—Juvenile, Single Tube, Guaranteed.

SADDLE—Juvenile padded.

HANDLE BAR—Juvenile 16-inch Adjustable.

PEDALS—Juvenile Rat Trap.

CHAIN—Diamond, $\frac{3}{16}$″.

HANGER—One piece, Drop Forged, 5½-inch Cranks.

SPROCKETS—Front, 22-tooth. Rear, 8-tooth.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.

GIRLS	Price
MODEL 25—16″ Frame, 24″ Wheels	22.50
MODEL 27—18″ Frame, 26″ Wheels	25.00

COLOR—No. 7 Blue, with No. 9 Red Spiked Head.

RIMS—No. 76 Aluminum Finish, Handsomely Striped.

TIRES—Juvenile Single Tube, Guaranteed.

SADDLE—Juvenile padded.

HANDLE BAR—Juvenile 16-inch Adjustable.

PEDALS—Juvenile Rubber.

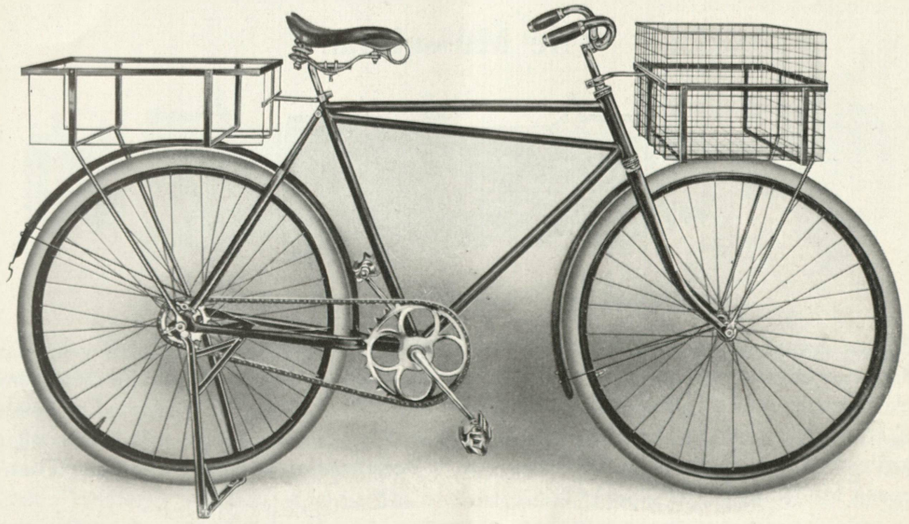
CHAIN—Diamond, $\frac{3}{16}$″.

HANGER—One piece, Drop Forged, 5½-inch Cranks.

SPROCKETS—Front, 22-tooth. Rear, 8-tooth.

GUARDS—Wood Mud Guards to match Rims. Steel Chain Guards to match Frame.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.



THE MIAMI CARRYALL.

WHEN we put this special model on the market, two seasons ago, it created a sensation. Dealers everywhere, and in every line, found that it exactly filled a long-felt necessity.

The Miami Carryall is made to wear and stand hard usage. It is built of extra heavy, seamless, steel tubing, Tandem spokes and hubs, with knock-out front axle, and has a double bar reinforcement, so that it is especially adapted to hard service and the carrying of heavy loads. With our one-piece, drop-forged crank construction, this Carryall, though heavy, is as easy-running as any ordinary roadster bicycle.

SPECIFICATIONS

MIAMI CARRYALL, WITH FRONT AND REAR CARRIER AND ONE BASKET. PRICE $40.00

COLOR—Frame Black, Carriers, plain Black, Baskets enameled Black, 12 inches long, x 18 inches wide x 10 inches deep.

HEIGHT—22 and 24 inches.

FRAME—Double bar, extra heavy construction, made throughout of cold drawn seamless steel tubing, 1-inch diameter, 18-gauge all joints flush and heavily reinforced. Pinch bolt binder.

WHEEL-BASE—45 inches.

HANGER—One piece, drop forged.

SPROCKET—26 x 10 (74).

RIMS—Extra strong one-piece. No. 160 Finish Black with Double Gold Hair line on sides.

TIRES—Pathfinder Non-Skid Extra Heavy Tires. 1½″ size only.

HUBS—Tandem, with wide flanges, knock-out front axles, heavy cups and cones.

HANDLE BARS—Adjustable, with Wear Well Grips.

SADDLE—Star U, Option Eagle Roadster.

PEDALS—Bridgeport Combination.

CHAIN—Diamond No. 29, $\frac{3}{16}$″.

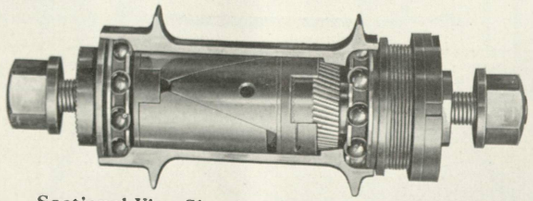
SEAT POST—$\frac{13}{16}$″ Forward L.

GUARDS—Steel front and rear, enameled Black.

TOOL BAG—Tools and Repair Kit.

COASTER BRAKE—Musselman, $5.00 extra. See page 18.

The Musselman



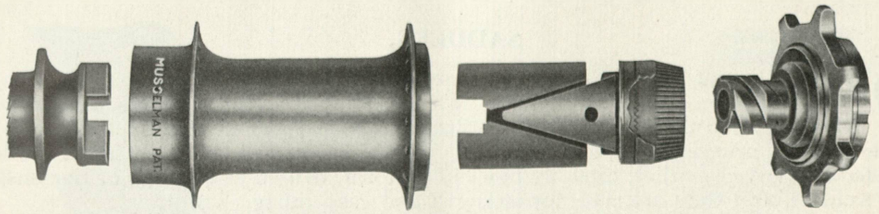
Sectional View Showing Arrangement of Parts.

IT'S an actual fact that 95% of the bicycles that we make and ship each year, carry Coaster Brake equipment and 90% of them are equipped with The Musselman Automatic and Armless Coaster Brake. Just think of it—90% out of a possible 95% equipped with the Musselman Brake. There is a reason for it. It is the original "Armless" Coaster Brake and imitators of its construction have sprung up. There is a reason for that also.

Despite imitation, which, by the way, is the sincerest form of flattery, and the keenest kind of keen competition, the Musselman Brake has marched steadily onward and upward until now, after being on the market for only four short years, it has reached the topmost pinnacle of popular favor and is by far the most sought for Coaster Brake on the market and is in greater demand everywhere than any other coaster brake made. There is also a reason for that.

The Musselman Coaster Brake is the smallest, lightest, simplest, and yet the strongest of all Coaster Brakes, and is so very simple in construction that a mere child can easily take it apart or put it together. There is nothing in the nature of a jig-saw puzzle about the Musselman Brake. It has been used and tested, by actual, every-day, hard, grinding tests, for the past four years and has been proved absolutely to be as much superior to the ordinary coaster brake, as the present day bicycle is to the old ordinary. It has the appearance of a plain barrel hub, weighs only 25 ounces and has absolutely no springs, levers, braces or complicated parts in its make up. No side arm or lock washer is required and the construction is such that there is no possibility of spreading the rear fork tips as there is with a so-called lock washer arrangement. Only half the parts ordinarily used in a coaster brake are required for the Musselman Brake and every part works automatically and with perfection. No slipping, clicking or rattling; free in coasting, positive and sensitive in driving and braking. Isn't there good reason why the Musselman Brake should make such rapid strides in popular favor, and in such a short space of time?

Coaster and Brake



Only Five Actual Working Parts in the Musselman Brake.

Whenever any mechanical device is put into practical use, and imitators immediately spring up, isn't it pretty conclusive evidence that the original is right and that the idea is good? Otherwise, why would competitors try to imitate?.

It was the real climax of the grand triumph of the Musselman Armless Coaster Brake when our competitors were forced to admit the superiority of "the Armless Wonder" through imitating it, altho like all imitations, these other brakes do not have the features that characterize the Musselman and make it the one truly perfect device.

The use of a lock-washer has been proclaimed to be a valuable addition to those Coaster Brakes that do not use the side arm. We do not use a lock-washer on our Coaster Brakes, for we have found that construction unsafe. With the lock washer construction there is great danger of the rear fork ends spreading, especially should the axle nuts, unexpectedly, become loose. This would permit the rear wheel to drop down and out of the frame, and the direful results that would follow are obvious. Think of a rider in the act of coasting down a steep hill, when suddenly the rear wheel becomes unmanageable. With control of the rear wheel lost, the rider is absolutely powerless to stop the machine, and certain injury, or even death, is sure to be the result.

With the Musselman Brake such an accident is utterly impossible. The action of the stationary cone is such, that should the axle nuts become loose, the act of throwing on the Brake, by back-peddling, automatically tightens them, and there is absolutely no possibility of a spreading of the rear fork ends. No accident of such character could possibly happen with the Musselman Brake.

Isn't there good Reason why, in spite of imitation and in spite of competition, the Musselman Brake, ever since its inception, has made the strongest kind of an impression on riders and is steadily and surely pushing its competitors into the background?

We positively and absolutely guarantee every Musselman Coaster Brake, and we furnish them to fit any bicycle, regardless of make. Be sure to specify the Musselman Armless Coaster Brake, on your bicycle, and you will be sure to get the best.

Racycle Equipment

SADDLES.

OUR 1911 line of Saddles is very complete, as will be noted in the illustration on the opposite page. We offer options of coil spring and suspension saddles, on all Racycles, and the special "Racycle" saddle, furnished on the Racycle Pacemaker, is the highest priced and easiest riding bicycle saddle made. Only the finest grade of selected, imported leather, carefully blocked to form, is used in the tops of our suspension saddles, and they are made for strength and easy riding.

HANDLE BARS AND GRIPS.

Kelley Handle Bars are too well known to require comment. We furnish them almost exclusively on all Racycles, and find them the most popular Handle Bars that we have ever used. Adjustable to twenty-five different positions. The Kelly plain stem bar will be shipped unless otherwise specified. See illustration on opposite page. The new Rubber grips, furnished on the higher grade Models, are the most expensive bicycle grips made.

TIRES.

Single Clinch Tires, with Steel Lined Wood Rims, have been adopted as our regular tire equipment on the higher grade Racycles for the season of 1911, because we have found after exhaustive tests, that they give most excellent service and then too, the double tube and clincher rim features make it very easy to take care of these tires and they are very popular with the average rider.

We also furnish Hartford and our own Racycle Guaranteed Single Tube Tires and recommend them as highly satisfactory to those riders who prefer a single tube tire equipment.

HUBS.

Hubs, turned from solid bar stock, are used exclusively in all Racycles. They are of the new spindle center design, carrying ¼-inch balls, and are positively self-oiling. Our Hubs will run for a full year without re-oiling, and are the most expensive bicycle hubs made.

CHAINS.

The principle upon which Racycle Hangers are constructed makes it possible for us to do away with the heavy, cumbersome chain used on ordinary bicycles, for the strain on the chain of a bicycle is 50% more than that on the chain of a Racycle. We use a neat ⅛-inch chain on all Racycles, which greatly improves the appearance of the wheel. This year we offer Roller Chain equipment, without extra charge, on the Racycle Pacemaker Model 160, and the Racycle Rideabout, Model 162. All chains are made of nickel steel.

The Racycle Equipment

INSTRUCTIONS

NO open accounts, except with our regular dealers. Terms net cash with order. C. O. D. shipments must be accompanied by enough cash to cover express charges both ways. Remittances must be made by bank draft, post office or express money order. All goods f. o. b. Middletown, Ohio.

We do not guarantee the safe delivery of goods. Our responsibility ceases when the machines or parts are delivered to the transportation companies.

Machines ordered with equipments, not specified in our catalog, will be shipped short such parts, and a corresponding reduction allowed for the shortage.

All complaints relative to factory brand tires, saddles and coaster brakes must be sent direct to their respective manufacturers, whose addresses are given below. This is imperative.

Tires that have been rim-cut, plugged or filled with never-leak will not be replaced, either by us or the makers.

EQUIPMENT	ADDRESSES MAKERS
Kelly Handle Bars	Kelly Handle Bar Co., Cleveland, Ohio.
Hartford Tires	Hartford Rubber Works Co., Hartford, Conn.
Single Clinch and Kokomo Double Clinch Tires	The Kokomo Rubber Co., Kokomo, Ind.
Indianapolis G. & J. Tires	The G. & J. Tire Co., Indianapolis, Ind.
Palmer Tires	The B. F. Goodrich Co., Akron, Ohio.
Pathfinder and Marathon Tires	Goodyear Tire & Rubber Co., Akron, Ohio.
Troxel, Eagle and Star Saddles	The Troxel Mfg. Co., Elyria, Ohio.
Persons' Saddles	The Persons Mfg. Co., Worcester, Mass.

WE MANUFACTURE THE MUSSELMAN COASTER BRAKE AND FULLY GUARANTEE IT.

NOTE:—We positively do not guarantee any Coaster Brake, except the Musselman, and all complaints and orders for repairs must be sent to the respective makers.

All Coaster Brakes used on Racycles are made with a special thread to conform to the threads of our own make regular biplane rear sprockets, hence it should be borne in mind that Racycle Sprockets cannot be used on the ordinary brakes. For Racycles, order Coaster Brakes or Sprockets from us or from our agents, being sure to mention that they are for Racycles.

TELEGRAPH CODE

WORD	MEANING
About	Express at once.
Abroad	Freight at once.
Agog	Have you shipped?
Agony	Answer by Mail.
Agree	Answer by wire.
Alone	We expect to express today.
Anger	Too late to make change.
Apart	Too late, goods already shipped.
Ashes	Send with our order of.
Awake	Standard color mentioned in catalog. (Wire name of any other color desired and state shade.)
Axle	Balance of Specifications regular.
Baby	Model 160, 20-inch frame.
Babes	Model 160, 22-inch frame.
Babaers	Model 160, 24-inch frame.
Bacas	Model 161, 20-inch frame.
Bacabos	Model 161, 22-inch frame.
Badaming	Model 162, 20-inch frame.
Badamor	Model 162, 22-inch frame.
Badasas	Model 162, 24-inch frame.
Batfuler,	Model 163, 20-inch frame.
Baying	Model 163, 22-inch frame.
Bafars	Model 164, 20-inch frame.
Bafaris	Model 164, 22-inch frame.
Bafarums	Model 164, 24-inch frame.
Bags	Model 165, 20-inch frame.
Bagors	Model 165, 22-inch frame.
Bagats	Model 165, 24-inch frame.
Baken	Model 168, 20-inch frame.
Bakoning	Model 168, 22-inch frame.
Bakpaning	Model 168, 24-inch frame.
Bailed	Model 169, 20-inch frame.
Balding	Model 169, 22-inch frame.
Behooving	Model 24, 16-inch frame.
Behorned	Model 26, 18-inch frame.
Behowl	Model 25, 16-inch frame.
Bejewel	Model 27, 18-inch frame.
Bekaden	Miami Carryall, 22-inch frame.
Bejumble	Miami Carryall, 24-inch frame.
Car	Racycle Tires, 1 ⅜-inch.
Card	Racycle Tires, 1 ½-inch.
Carding	Racycle Tires, 1 ⅝-inch.
Cast	Hartford No. 77 Tires, 1 ⅜-inch.
Castor	Hartford No. 77 Tires, 1 ½-inch.
Casting	Hartford No. 77 Tires, 1- ⅝inch.
Cert	G. & J. Tires, 1 ⅜-inch.
Certy	G. & J. Tires, 1 ½-inch.

WORD	MEANING
Certain	G. & J. Tires, 1 ⅝-inch.
Censor	Palmer Tires, 1-inch.
Chance	Palmer Tires, 1 ¼-inch.
Charter	Palmer Tires, 1 ⅜-inch.
Chute	Palmer Tires, 1 ½-inch.
Cony	Defender Cactus Tires, 1 ⅜-inch.
Conive	Defender Cactus Tires, 1 ½-inch.
Convex	Defender Cactus Tires, 1 ⅝-inch.
Compel	Marathon Tires, 1 ⅜-inch.
Comply	Marathon Tires, 1 ½-inch.
Comus	Marathon Tires, 1 ⅝-inch.
Clansman	Pathfinder Tires, 1 ⅜-inch.
Clanum	Pathfinder Tires, 1 ½-inch.
Clapet	Pathfinder Tires, 1 ¾-inch.
Clapotage	Pathfinder Ex. Heavy Non-Skid 1 ⅝-inch.
Clowns	Juvenile Tires, 1 ¼-inch.
Clownishly	Juvenile Tires, 1 ⅜-inch.
Clownish	Juvenile Tires, 1 ½-inch.
Coldish	Single Clincher Tires, 1 ⅜-inch.
Colebant	Single Clincher Tires, 1 ½-inch.
Colebatis	Single Clincher Tires, 1 ¾-inch.
Cut	Star Pedals.
Cutter	Star Racing Pedals.
Cutting	Ladies' Rubber Pedals.
Dap	Bridgeport Pedals.
Damper	Standard Pedals.
Dancer	Racycle Saddle.
Daring	Eagle Empire Saddle.
Dairy	Eagle Roadster Saddle.
Fib	Union T Saddle.
Fob	Eagle Special Saddle.
Fable	Persons Maximus Saddle.
Facing	Persons Royal Racer Saddle.
Fog	Troxel 30-U Saddle.
Faculty	Troxel 10-A Saddle.
Fagy	Troxel No. 14-C Saddle.
Fearful	Troxel No. 4 Saddle.
Faint	Troxel Star "U" Saddle.
Fear	Star Three Coil Saddle.
Ferry	Star Two Coil Saddle.
Gaze	Musselman Coaster and Brake.
Globe	Kelly Regular Bar.
Gem	Kelly Extension Bar.
Gale	
Gauge	
Gerty	
Grasp	

GEARS AND TELEGRAPH CODE OF EACH GEAR

No. of Teeth in Front Sprocket	Number of Teeth in Rear Sprocket. 7	8	9	10	11	12	13	14	16
(Models 161, 163, and 169 24 tooth	Hate 96	Heat 84	Hiss 74	Hot 68	Hit 61				
(Models 161 and 168 26 tooth	Jade 104	Jailor 91	Jerk 80	Jester 72	Joker 66	Joy 60			
(Models 161, 163, 164 and 165 30 tooth	Jab 120	Jack 105	Jane 91	John 84	Jule 76	Julia 70	Julie 64		
(Model 160) 40 tooth	Kam 160	Kant 140	Kent 124	Kind 112	Kat 103	Kit 93	Kig 86	Kite 80	Kitten 70
Model 162) 70 tooth- ½ pitch	Log 140	Los 122	Leap 108	Lint 98	Lit 89	Lige 82	Lid 75	Laf 70	

NOTE.—On account of the difference in the pitch of the Rear Sprockets on Model 162, same will have just double the number of teeth that we have listed, but the gear will be as specified above.

N. B.—Have the telegraph operator spell over each word to you in order to make sure that he has it right before he sends the message.

"ITS ALL IN THE CRANK-HANGER"

IF YOU ARE INTERESTED IN

MOTOR CYCLES

Don't Fail to Get One of Our
New 1911 Catalogues of

THE RACYCLE MOTORCYCLE

WITH FREE ENGINE CLUTCH AND
MUSSELMAN AIR-COOLED BRAKE.

SENT FREE TO ANY ADDRESS

A TEST OF THE STRENGTH OF A RACYCLE.

We can produce a sworn statement to the effect that the above reproduction was made from an actual photograph. All Racycles are Strong, Reliable and Easy Running. We build no special wheels.

THE MIAMI CYCLE & MFG. CO. Middletown, Ohio

EASIEST RUNNING BICYCLE MADE